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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,605	04/26/2001	Thomas T. Nguyen	28945-041	7668

7590 08/16/2004

Mr. Dennis Joyce  
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EXAMINER

HENNING, MATTHEW T

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/843,605	<b>Applicant(s)</b> NGUYEN ET AL.	
	<b>Examiner</b> Matthew T Henning	<b>Art Unit</b> 2131	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☒ Claim(s) 1-34 and 50 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/06/01</u> . | 6) <input type="checkbox"/> Other: _____  |

This action is in response to the communication filed on 04/26/2001.

**DETAILED ACTION**

1. Claims 1-50 have been examined.

***Title***

2. The title of the invention is acceptable.

***Priority***

3. The application has been filed under Title 35 U.S.C §119(e), claiming priority to Provisional application 60/199,984, filed 04/27/2000.

4. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1, 16, 34 and 49 of this application. Provisional application 60/199,984 does not discuss the internal makeup of the managed security server, such as a memory for storing at least one address, or a processor for configuring the network. The provision al also fails to mention the use of IKE or the exchange of IKE configuration information and therefore is not enabling for these claims. Therefore the claim to priority of this provisional application is not granted.

5. The effective filing date for the subject matter defined in the pending claims in this application is 04/26/2001.

***Information Disclosure Statement***

6. The information disclosure statement (IDS) submitted on 08/06/2001 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

7. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

***Drawings***

8. The drawings filed on 09/27/2001 are objected to for the following reasons. Figure 4, as described on page 7 of the specification, is "a typical network configuration" of the prior art and therefore must be labeled as "Prior Art". Figures 5 and 6 also only show that which is old, as described on pages 12-13 of the specification, and therefore must also be labeled prior art.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

9. The disclosure is objected to because the Brief Description of the Drawings does not properly describe Figures 1-6, as required by 37 C.F.R. 1.74. More specifically they Brief description should label these figures as prior art because only that which is old is shown. Appropriate correction is required. See MPEP § 608.01(f).

10. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

***Claim Objections***

11. The applicant is reminded that a series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

12. Claims 1-34, and 50 are objected to due to the use of parenthesized letters to distinguish between claim limitations. This is not consistent with the preferred claim form set out in 37 CFR 1.75(i) where a parenthesized letter would be a reference character to an element set forth in the detailed description of the invention. Correction is required. See MPEP § 608.01(m).

***Claim Rejections - 35 USC § 112***

13. Claims 6-10, and 12-16, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claims 6 and 13 recite the limitation "the input" in line 2. There is insufficient antecedent basis for this limitation in the claim.

15. Claim 9 recites the limitation "the second input" in line 2. There is insufficient antecedent basis for this limitation in the claim.

16. Claims 12 and 14-16 recite the limitation "the output" in line 2. There is insufficient antecedent basis for this limitation in the claim.

17. Any claim not specifically mentioned is rejected by virtue of its dependency to one of the above claims.

***Claim Rejections - 35 USC § 102***

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

*(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

19. Claims 1-14, 17-32, 35-47, and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoke et al. (U.S. Patent Number 6,701,437), hereinafter referred to as Hoke.

20. Claim 1 recites a Managed Security Server for use in a Secure Segment Communications Network, the Managed Security Server (Element 115) comprising: a memory to store an address of at least one secure gateway device (Element 115), wherein said secure gateway device is a member of the Secure Segment Communications Network (See Hoke Col. 14 Paragraph 4 and Figures 1 and 6); and a processor (Element 600) for configuring said Secure Segment Communications Network by configuring the at least one secure gateway device (See Hoke Col. 14 Paragraph 2-4).

21. Claim 2 recites that the Managed Security Server is a secure gateway device (See Hoke Element 115 and Figure 6 Elements 614 and 616).

22. Claim 3 recites that the memory stores a static public IP address, wherein the static public IP address is assigned to the Managed Security Server (See Hoke Col. 16 paragraph 2).

23. Claim 4 recites that the at least one secure gateway device, the secure gateway device has a memory containing the static public IP address of the Managed Security Server (See Hoke Col. 16 paragraph 2 wherein the secure gateway device and the Managed Security Server are both Element 115).

24. Claim 5 recites that the address of the at least one secure gateway device is dynamically assigned (See Hoke Col. 16 paragraph 2).

25. Claim 6 recites the input is additionally configured to receive a request for an address of a destination node, wherein the destination node is a part of said Secure Segment Communications Network (See Hoke Figure 3).



26. Claim 7 recites that the request is tunneled and encrypted (See Hoke Figure 3 Steps 340 and 350).

27. Claim 8 recites that the request is further comprised of an IP packet (Element 230), wherein the IP packet has the virtual IP address in a IP address field (Element 232) and a public IP address encoded as a hardware address in a hardware address field (Element 212) (See Hoke Figure 2 and Col. 9 paragraphs 2-6).

28. Claim 9 recites an output configured to receive the request for an address from the second input, and to transmit the request for an address to the destination node (See Hoke Figure 3 Step 360).

29. Claim 10 recites that the destination node responds to the forwarded request for an address with an address response (See Hoke Figure 5).

30. Claim 11 recites that a communication from a local area network to a second local area network is transferred through a wide area network by the at least one secure gateway devices through a tunnel (See Hoke Figures 3-4 and Figure 1 Element 100).

31. Claim 12 recites that the output is also configured to output tunnel configuration information to the at least one secure gateway device (See Hoke Fig. 3 Steps 350 and 360).

32. Claim 13 recites that the input is additionally configured to receive a transmission of data intended for a destination node (See Fig. 3 Steps 310 and 330).

33. Claim 14 recites that the output is additionally configured to transmit the transmission of data to a secure gateway device that corresponds to the destination node (See Fig. 3 Step 360 and Fig. 4 Steps 400, 410, and 430).

34. Claim 17 recites a method of managing a Secure Segment Communications Network, wherein the Secure Segment Communications Network is further comprised of a plurality of secure gateway devices (See Hoke Fig. 1 Elements 115, 125, 135, 145, 155, and 160), the method comprising the steps of: connecting the plurality of secure gateway devices to a communications network (See Hoke Fig. 1); and designating one of the plurality of secure gateway devices to be a Managed Security Server wherein the Managed Security Server configures the Secure Segment Communications Network (See Hoke Figure 1 Element 160 and Col. 7 Paragraph 2 and Col. 16 Paragraph 3).

35. Claim 18 recites configuring the Secure Segment Communications Network at a second Managed Security Server secure gateway (See Hoke Col. 7 Paragraph 2).

36. Claim 19 recites assigning each secure gateway device of the plurality of secure gateway devices an address that is independent of any other address on the network. Hoke disclosed that the VPN units each has an IP address in order to receive VPN packets for its private network (See Hoke Col. 3 Paragraph 6). It was inherent that the addresses were independent of each other in order for proper packet routing though the Internet.

37. Claims 20 and 21 recite assigning the Managed Security Server a static public IP address and storing, at each secure gateway device of the plurality of secure gateway devices, the static public IP address of the Managed Security Server. (See Hoke Col. 16 Paragraph 3 Line 8 and Col. 14 Paragraph 6 Lines 4-9 wherein it was inherent that the "route" contained the specific IP address of the Management station in order to communicate with the station).

38. Claim 22 recites dynamically assigning the address (See Hoke Col. 16 Paragraph 2 wherein the manager supports both static and dynamic addressing).

39. Claim 23 recites opening a registration channel from each of the secure gateway devices of the plurality of gateway devices to the Managed Security Server; and conveying the dynamically assigned address to the Managed Security Server (See Hoke Col. 16 Paragraphs 3-5).

40. Claim 24 recites sending a request for an address of a destination node from a source node to the Managed Security Server, wherein the destination node is a part of said Secure Segment Communications Network (See Hoke Fig. 8).

41. Claim 25 recites that the request is tunneled and encrypted (See Hoke Col. 3 Paragraph 6).

42. Claim 26 recites that the request is further comprised of an IP packet wherein the IP packet has the virtual IP address in a IP address field and a public IP address encoded as a hardware address in a hardware address field (See rejection of claim 8 above).

43. Claim 27 recites forwarding the request for an address of a destination node of step (g) from the Managed Security Server to the destination node (See Hoke Col. 13 Paragraph 4).

44. Claim 28 recites responding to the forwarded request for an address at the destination node with an address response (See Hoke Col. 13 Paragraphs 5-6).

45. Claim 29 is rejected for the same reasons as claim 11 above.

46. Claim 30 recites providing tunnel configuration information from the Managed Security Server to the plurality of secure gateway devices (See Hoke Col. 16 Paragraph 3).

47. Claims 31 and 32 recite receiving at the Managed Security Server a transmission of data intended for a destination node and transmitting from the Managed Security Server the transmission of data to a secure gateway device of the plurality of secure gateway devices that corresponds to the destination node (See Fig. 3 and Fig 4).

48. Claim 35 recites a first output configured to output a request for an address to a destination node to a Managed Security Server (See Hoke Col. 16 Paragraph 3 request to edit a lookup table); an input to receive an address from the Managed Security Server in response to the request for an address to a destination node (See Hoke Col. 16 Paragraph 5); and a second output configured to output data to a destination node according to the received address (See Hoke Fig. 3).

49. Claim 36 recites that the Secure Segment Communications Network is configured by a second Managed Security Server in the event the Managed Security Server fails (See Hoke Col. 7 Paragraph 2).

50. Claims 37-41 are rejected for the same reasons as claims 19-23 above.

51. Claims 42-47 are rejected for the same reasons as claims 25-30 above.

52. Claim 50 recites connecting the plurality of secure gateway devices to a communications network (See Hoke Fig. 1); designating one of the plurality of secure gateway devices to be a Managed Security Server, wherein the Managed Security Server configures the Secure Segment Communications Network (See rejection of

claim 17 above); tunneling a broadcast or multicast transmission as a uni-cast transmission on a Internet to at least one secure gateway device with a known address, including the Managed Security Server (See Hoke Col. 13 Paragraph 2 and Fig. 3); and transmitting said broadcast or multicast transmission from the Managed Security Server to a plurality of secure gateway devices with dynamically assigned addresses (See Hoke Col. 13 Paragraph 2 and Col. 16 Paragraph 2).

***Claim Rejections - 35 USC § 103***

53. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

54. Claim 15-16, 33-34, and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoke as applied to claim 1 above, and further in view of Kent et al. ("Security Architecture for the Internet Protocol") hereinafter referred to as Kent.

Hoke disclosed communication between two gateways over the Internet (See Fig. 3 Step 360), but Hoke failed to disclose the specific security protocols used in the communications.

Kent teaches that IPsec can be used for providing transport security at the IP layer (See Kent Page 2 Paragraph 1).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Kent in the invention of Hoke in order to provide security to the packets sent out over the public network or Internet. This would have been obvious because the ordinary person skilled in the art would have been motivated to make the Virtual Private Network of Hoke virtual and private through the use of IPsec's payload encapsulation, cryptography, and authentication.

55. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hoke and Kent. Kent disclosed that the default automated key exchange for IPsec was through the use of IKE, which required the exchange of IKE information (See Kent Section 4.6.2).

56. Claims 33 and 34 are rejected for the same reasons as claims 15 and 16 above.

57. Claims 48 and 49 are rejected for the same reasons as claims 15 and 16 above.

**Conclusion**

58. Claims 1-50 have been rejected.

59. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

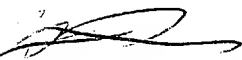
- a. Friedman et al. (U.S. Patent Number 5,757,924) disclosed a gateway security device for encrypting all external communications.
- b. Arrow et al. (U.S. Patent Number 6,154,839) disclosed an address translation unit for use with a Virtual Private Network Manager.
- c. Gilbrech (U.S. Patent Number 6,173,399) disclosed a system for implementing Virtual Private Networks.
- d. Arrow et al. (U.S. Patent Number 6,226,751) disclosed a Virtual Private management System.

60. Please direct all inquiries concerning this communication to Matthew Henning whose telephone number is (703) 305-0713. The examiner can normally be reached Monday-Friday from 9am to 4pm, EST.


If attempts to reach examiner by telephone are unsuccessful, the examiner's acting supervisor, Ayaz Sheikh, can be reached at (703) 305-9648. The fax phone number for this group is (703) 305-3718.

Art Unit: 2131

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Matthew Henning  
Assistant Examiner  
Art Unit 2131

  
EMMANUEL L. MOISE  
PRIMARY EXAMINER  
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